Amendments to the Claims:

No amendments to the claims are made, however, for the convenience of the examiner all claims as originally filed are set forth in this section.

1. (Original) Circuitry, comprising:

at least one first timing circuit including a first input, a first output, and a current source, the first input being electrically coupled to the first output, the first input being coupleable to at least one capacitor and at least one clamping element,

wherein the current source is operative to apply a constant current to the capacitor, thereby generating a ramped timing signal at the first input and providing the ramped timing signal to the first output electrically coupled to the first input, and

wherein the timing signal provided at the first output of the first timing circuit has an associated first state in the event only the capacitor is coupled between the first input and ground, and an associated second state in the event the clamping element is coupled between the first input and ground; and

a second circuit operable in a plurality of modes having at least one control input and a second output, the control input being electrically coupled to the first output of the first timing circuit,

wherein the second circuit is configured to operate in a first mode in the event the timing signal having the associated first state is provided to the control input via the first output, and to operate in a second mode in the event the timing signal having the associated second state is provided to the control input via the first output.

2. (Original) The circuitry of claim 1 wherein the first timing circuit comprises a soft-start circuit.

3. (Original) The circuitry of claim 2 wherein the soft-start circuit is configured to generate a soft-start signal having an associated soft-start time (T.sub.SS), and

wherein T.sub.SS is determined by a predetermined value of the capacitor.

4. (Original) The circuitry of claim 3 wherein T.sub.SS is determined by a formula

C.sub.SSx(Farads)=T.sub.SS(sec).times.2.3.times.10.sup.-6.

5. (Original) The circuitry of claim 1 wherein the second circuit comprises an oscillator.

6. (Original) The circuitry of claim 5 wherein the oscillator is configured to generate a plurality of first switching frequencies in the event the timing signal having the associated first state is provided to the control input, and to generate a plurality of second switching frequencies in the event the timing signal having the associated second state is provided to the control input.

7. (Original) The circuitry of claim 6 wherein the plurality of first switching frequencies includes at least one first low switching frequency and at least one first high switching frequency, wherein the oscillator is configured to generate the first low switching frequency during a first time period, and wherein the oscillator is configured to generate the first high switching frequency during a second time period subsequent to the first time period.

8. (Original) The circuitry of claim 6 wherein the plurality of second switching frequencies includes at least one second low switching frequency and at least one second high switching frequency, wherein the oscillator is configured to generate the second low switching frequency during a first time period, and wherein the oscillator is configured to generate the second high switching frequency during a second time period subsequent to the first time period.

9. (Original) A method of generating at least one soft-start signal and at least one switching frequency, comprising the steps of:

providing at least one soft-start circuit including a first input, a first output and a current source, the first input being electrically coupled to the first output, the first input being coupleable to at least one capacitor and at least one resistor;

applying a constant current to the capacitor by the current source, thereby generating a ramped soft-start signal at the first input and providing the ramped soft-start signal to the first output electrically coupled to the first input, wherein the soft-start signal provided at the first output of the soft-start circuit has an associated first state in the event only the capacitor is coupled between the first input and ground, and an associated second state in the event the resistor is coupled between the first input and ground;

providing an oscillator having at least one control input and a second output, the control input being electrically coupled to the first output of the soft-start circuit;

in the event the soft-start signal having the associated first state is provided to the control input via the first output, generating at least one first switching frequency by the oscillator; and

in the event the soft-start signal having the associated second state is provided to the control input via the first output, generating at least one second switching frequency by the oscillator.

10. (Original) The method of claim 9 wherein the applying step includes generating a soft-start signal having an associated soft-start time (T.sub.SS) by the soft-start circuit, and determining T.sub.SS by a predetermined value of the capacitor.

11. (Original) The method of claim 10 wherein the applying step includes determining T.sub.SS by a formula

C.sub.SSx(Farads)=T.sub.SS(sec).times.2.3.times.10.- sup.-6.

12. (Original) The method of claim 9 wherein the first generating step includes generating a plurality of first switching frequencies in the event the soft-start

signal having the associated first state is provided to the control input, and wherein the second generating step includes generating a plurality of second switching frequencies in the event the soft-start signal having the associated second state is provided to the control input.

13. (Original) The method of claim 12 wherein the plurality of first switching frequencies includes at least one first low switching frequency and at least one first high switching frequency, and wherein the first generating step includes generating the first low switching frequency during a first time period and generating the first high switching frequency during a second time period subsequent to the first time period.

14. (Original) The method of claim 12 wherein the plurality of second switching frequencies includes at least one second low switching frequency and at least one second high switching frequency, and wherein the second generating step includes generating the second low switching frequency during a first time period and generating the second high switching frequency during a second time period subsequent to the first time period.

15. (Original) A switch mode power converter configured to receive an input voltage and to generate an output voltage, comprising:

at least one soft-start circuit including a first input, a first output, and a current source, the first input being electrically coupled to the first output, the firs input being coupleable to at least one capacitor and at least one resistor, wherein the current source is operative to apply a constant current to the capacitor, thereby generating a ramped soft-start signal at the first input and providing the ramped soft-start signal to the first output electrically coupled to the first input,

wherein the soft-start signal provided at the first output of the soft-start circuit has an associated first state in the event only the capacitor is coupled between the first input and ground, and an associated second state in the event the resistor is coupled between the first input and ground; and

an oscillator having at least one control input and a second output, the control input being electrically coupled to the first output of the soft-start circuit,

wherein the oscillator is configured to generate a plurality of first switching frequencies in the event the soft-start signal having the associated first state is provided to the control input via the first output, and to generate a plurality of second switching frequencies in the event the soft-start signal having the associated second state is provided to the control input via the first output.

16. (Original) The converter of claim 15 wherein the plurality of first switching frequencies includes at least one first low switching frequency and at least one first high switching frequency, and wherein the oscillator is configured to generate the first low switching frequency during a first time period, and to generate the first high switching frequency during a second time period subsequent to the first time period in the event the output voltage has stabilized.

17. (Original) The converter of claim 15 wherein the plurality of second switching frequencies includes at least one second low switching frequency and at least one second high switching frequency, and wherein the oscillator is configured to generate the second low switching frequency during a first time period, and to generate the second high switching frequency during a second, time period subsequent to the first time period in the event the output voltage has stabilized.

18. (Original) A method of operating a switch mode power converter, the converter including at least one soft-start circuit and an oscillator, the soft-start circuit including a first input, a first output, and a current source, the first input being electrically coupled to the first output, the oscillator having at least one control input and a second output, the control input being electrically coupled to the first output of the soft-start circuit, comprising the steps of:

receiving an input voltage and generating an output voltage by the switch mode power converter;

applying a constant current to the capacitor by the current source, thereby generating a ramped soft-start signal at the first input and providing the ramped soft-start signal to the first output electrically coupled to the first input, wherein the soft-start signal provided at the first output of the soft-start circuit has an associated first state in the event only a capacitor is coupled between the first input and ground, and an associated second state in the event a resistor is coupled between the first input and ground;

in the event the soft-start signal having the associated first state is provided to the control input via the first output, generating a plurality of first switching frequencies by the oscillator; and

in the event the soft-start signal having the associated second state is provided to the control input via the first output, generating a plurality of second switching frequencies by the oscillator.

19. (Original) The method of claim 18 wherein the plurality of first switching frequencies includes at least one first low switching frequency and at least one first high switching frequency, and wherein the first generating step includes generating the first low switching frequency during a first time period and generating the first high switching frequency during a second time period subsequent to the first time period in the event the output voltage has stabilized.

20. (Original) The method of claim 18 wherein the plurality of second switching frequencies includes at least one second low switching frequency and at least one second high switching frequency, and wherein the second generating step includes generating the second low switching frequency during a first time period and generating the second high switching frequency during a second time period subsequent to the first time period in the event the output voltage has stabilized.